



# FUEL REPORT

Sample Rating Trend



ISO

Area

{UNASSIGNED}

Machine Id

**KIOTI DK4510 - FUCHS (S/N XR7600233)**

Component

**Tank Diesel Fuel**

Fluid

**No.1 DIESEL FUEL (LOW-SULPHUR) (20 Oz)**

## DIAGNOSIS

### Recommendation

We advise that you filter this fluid before use. All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel. ( Customer Sample Comment: Testing fuel sample for warranty coverage on KIOTI engine )

### Corrosion

All metal levels are normal indicating no corrosion in the system.

### Contaminants

There is a high amount of particulates present in the fuel. There is no bacteria or fungus (yeast and/or mold) indicated in the sample. The water content is negligible.

### Fuel Condition

Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KT0000904</b>	---	---
Sample Date	Client Info		<b>09 Apr 2024</b>	---	---
Machine Age	hrs	Client Info	<b>349</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## PHYSICAL PROPERTIES

	method	limit/base	current	history1	history2
Fuel Color	text	*Visual Screen	<b>Red</b>	---	---
ASTM Color	scalar	*ASTM D1500	<b>L4.0</b>	---	---
Visc @ 40°C	cSt	ASTM D445	<b>2.74</b>	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated	<b>60.6</b>	---	---

## SULFUR CONTENT

	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m 33	<b>4</b>	---	---
Sulfur (UVF)	ppm	ASTM D5453	<b>8</b>	---	---

## DISTILLATION

	method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86 159	<b>171</b>	---	---
5% Distillation Point	°C	ASTM D86	<b>199</b>	---	---
10% Distill Point	°C	ASTM D86 184	<b>211</b>	---	---
15% Distillation Point	°C	ASTM D86	<b>220</b>	---	---
20% Distill Point	°C	ASTM D86 196	<b>228</b>	---	---
30% Distill Point	°C	ASTM D86 205	<b>243</b>	---	---
40% Distill Point	°C	ASTM D86 216	<b>255</b>	---	---
50% Distill Point	°C	ASTM D86 227	<b>268</b>	---	---
60% Distill Point	°C	ASTM D86 238	<b>281</b>	---	---
70% Distill Point	°C	ASTM D86 251	<b>294</b>	---	---
80% Distill Point	°C	ASTM D86 264	<b>308</b>	---	---
85% Distillation Point	°C	ASTM D86	<b>318</b>	---	---
90% Distill Point	°C	ASTM D86	<b>328</b>	---	---
95% Distillation Point	°C	ASTM D86	<b>345</b>	---	---
Final Boiling Point	°C	ASTM D86 309	<b>358</b>	---	---

## IGNITION QUALITY

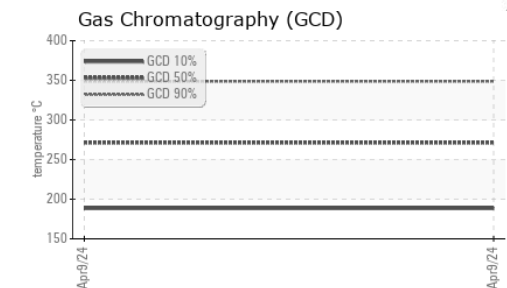
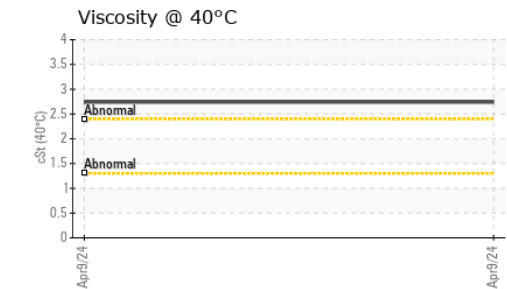
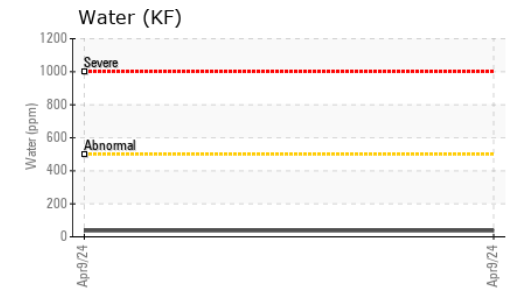
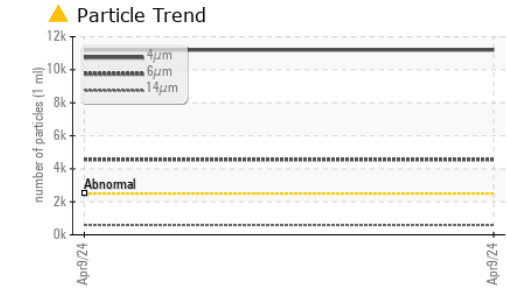
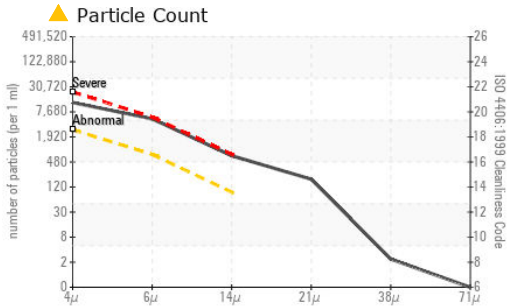
	method	limit/base	current	history1	history2
API Gravity	ASTM D7777	40.1	<b>38</b>	---	---
Cetane Index	ASTM D4737	<40.0	<b>54</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m <1.0	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185m <0.1	<b>1</b>	---	---
Potassium	ppm	ASTM D5185m <0.1	<b>0</b>	---	---
Water	%	ASTM D6304 <0.05	<b>0.003</b>	---	---
ppm Water	ppm	ASTM D6304 <500	<b>37</b>	---	---
% Gasoline	%	*In-House <0.50	<b>0.0</b>	---	---
% Biodiesel	%	*In-House <20.0	<b>0.0</b>	---	---



# FUEL REPORT

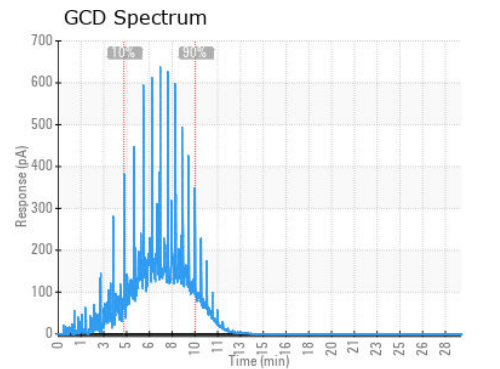
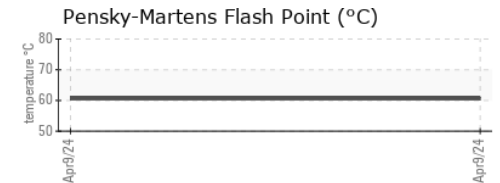
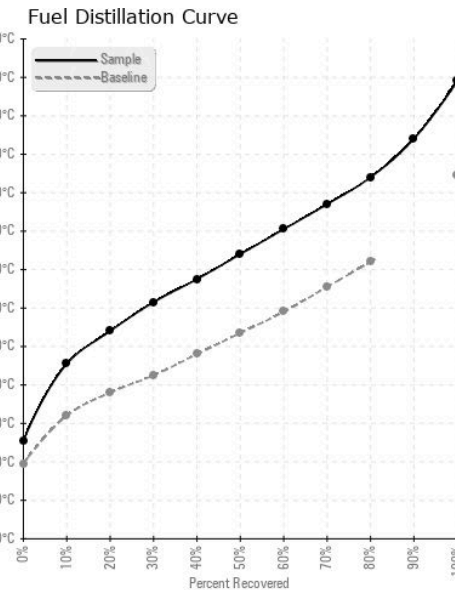


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 11197	---	---
Particles >6µm	ASTM D7647	>640	▲ 4562	---	---
Particles >14µm	ASTM D7647	>80	▲ 596	---	---
Particles >21µm	ASTM D7647	>20	▲ 163	---	---
Particles >38µm	ASTM D7647	>4	2	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 21/19/16	---	---

HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	0	---	---
Nickel	ppm	ASTM D5185m <0.1	0	---	---
Lead	ppm	ASTM D5185m <0.1	0	---	---
Vanadium	ppm	ASTM D5185m <0.1	0	---	---
Iron	ppm	ASTM D5185m <0.1	0	---	---
Calcium	ppm	ASTM D5185m <0.1	0	---	---
Magnesium	ppm	ASTM D5185m <0.1	0	---	---
Phosphorus	ppm	ASTM D5185m <0.1	0	---	---
Zinc	ppm	ASTM D5185m <0.1	0	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KT0000904  
**Lab Number** : 06149744  
**Unique Number** : 10979822  
**Test Package** : DF-2 ( Additional Tests: Fuel, Screen )  
**Received** : 15 Apr 2024  
**Tested** : 30 Apr 2024  
**Diagnosed** : 05 May 2024 - Doug Bogart

**HILL COUNTRY TRACTOR**  
 14620 IH 37 S  
 ELMENDORF, TX  
 US 78112  
 Contact: CORY RIVERA  
 crivera@mytexastractor.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)